

**A NEW SPECIES OF FRESHWATER CRAB OF THE
GENUS *NEOSTRENGERIA* PRETZMANN, 1965, FROM
META DEPARTMENT, COLOMBIA (CRUSTACEA:
DECAPODA: PSEUDOTHELPHUSIDAE)**

**Una nueva especie de cangrejo de agua dulce del género
Neostrengeria Pretzmann, 1965, del departamento del Meta,
Colombia (Crustacea: Decapoda: Pseudothelphusidae)**

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ABSTRACT

A new species of freshwater crab of the pseudothelphusid genus *Neostrengeria* Pretzmann, 1965, is described and illustrated. This discovery means the genus now contains 25 species, all of which are endemic to the Eastern Andes of Colombia. The new species is distinguished from their congeners primarily by the morphology of the first male gonopod, particularly by the shape of the accessory lobe, outline of apex and mesial lobe.

Key words. Taxonomy, Neotropical region, Brachyura, Hypolobocerini.

RESUMEN

Una nueva especie de cangrejo pseudothelphusido del género *Neostrengeria* Pretzmann, 1965, es descrita e ilustrada. Este descubrimiento significa que el género ahora contiene 25 especies, endémicas de los Andes Orientales de Colombia. La nueva especie se distingue de sus congéneres principalmente por la morfología del primer gonopodo del macho, particularmente por las formas del lóbulo accesorio, del ápice y del lóbulo mesial.

Palabras clave. Taxonomía, Región Neotropical, Brachyura, Hypolobocerini.

INTRODUCTION

The genus *Neostrengeria* Pretzmann, 1965, of the family Pseudothelphusidae, comprises a group of freshwater crabs that live in mountain springs and streams on the slopes and high plains of the Eastern Andes of Colombia (ca. 3-9° 40'N, 73-74° 50'W), at elevations of 470 to 3000 m. Recent collections in the Acacías region of Meta Department have resulted in the discovery of a new species. The addition of the new species brings to 25 the total number of taxa known in this genus.

The systematics and biogeography of the genus were reviewed by Campos & Rodríguez (1985), Campos & Lemaitre (1998), Campos & Pedraza (2008), and Campos (1992, 1994, 2000, 2004, 2010). The general characteristics of the genus, included species and an identification key was presented by Campos (2005).

The terminology used for the different processes of the male first gonopods is that established by Smalley (1964), Rodríguez (1982) and Campos (2005). The material is

deposited in the Museo de Historia Natural, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá (ICN-MHN). The abbreviations cb and cl, indicate carapace breadth and carapace length, respectively. Color nomenclature follows Smithe (1975).

TAXONOMY

Family Pseudothelphusidae Ortmann, 1893
Tribe Hypolobocerini Pretzmann, 1971
Genus *Neostrengeria* Pretzmann, 1965
Neostrengeria natashae, new species
Figs. 1, 2

Holotype. Municipio Acacías, Vereda Portachuelo, km 12 Manzanares Way, La Esmeralda Farm, elevation 650 m, Meta Department, Colombia, 4° 9' 28.63" N, 73° 46' 53.29" W, 25 Sep 2010, leg. G. Ballén, 1 male, cl 12.0 mm, cb 21.0 mm, ICN-MHN-CR 2616.

Paratype. Same locality data as holotype, 1 juvenil male, cl 9.5 mm, cb 15.5 mm, ICN-MHN-CR 2618.

Diagnosis. First male gonopod strongly bent caudo-cephalic; lateral lobe semicircular with distal portion semi-acute, directed distally; accessory lobe spatulated with distal portion regularly rounded, subequal in length to lateral lobe, almost continuous with lateral lobe, except by V-shaped recess between them distally, on lateral view (Fig. 2C); apex outline nearly oblong in distal view, latero-cephalic expanded into triangular projection, forming cephalo-mesial angle of 90° with prominent acute spine, directed mesially; mesial lobe subtriangular, directed cephalically, ending in acute spine; meso-caudal projection of spermatic channel terminating bifidly.

Description of holotype. Carapace (Fig. 1A, E) with straight, wide, deep cervical groove, ending some distance from lateral margin; anterolateral margin with shallow depression just posterior to antero-external orbital angle; lateral margin with series of papilliform teeth; postfrontal lobes small, oval, delimited anteriorly by 2 depressions; median groove shallow; front lacking distinct upper border, frontal area sloping downwards, bilobed in dorsal view, lower margin strongly sinuous in frontal view with row of tubercles; upper and lower orbital margins each fringed with tubercles; dorsal surface of carapace cover by small papillae, regions well demarcated; third maxilliped (Fig. 1D) with shallow depression on subdistal external margin of merus, exognath 0.65 times length of ischium; orifice of efferent branchial channel (Fig. 1C) open, nearly ovate.

First pereopods heterochelous (Fig. 1A); right cheliped (Fig. 1B) larger than left; merus with 3 crests as follows: upper crest with rows of tubercles, internal lower crest with 12 teeth, diminishing in size proximally, external lower crest with row of low tubercles; carpus with 5 tubercles on internal crest; palms of both chelipeds smooth, swollen; fingers of chelae with rows of tubercles, not gaping when closed, tips crossing, both fingers with large rounded teeth, intercalated with smaller ones. Walking legs (second to fifth pereopods) (Fig. 1A) slender, dactyli each about 1.7 times as long as propodi, with 5 longitudinal rows of spines diminishing in size proximally, arrangement of spines on dactylus of left third pereopod as follows: anterolateral and anteroventral rows each with 4 spines, external row with 4 spines plus 2 proximal papillae, posteroventral and posterolateral rows each with 3 spines plus 1 proximal papilla.

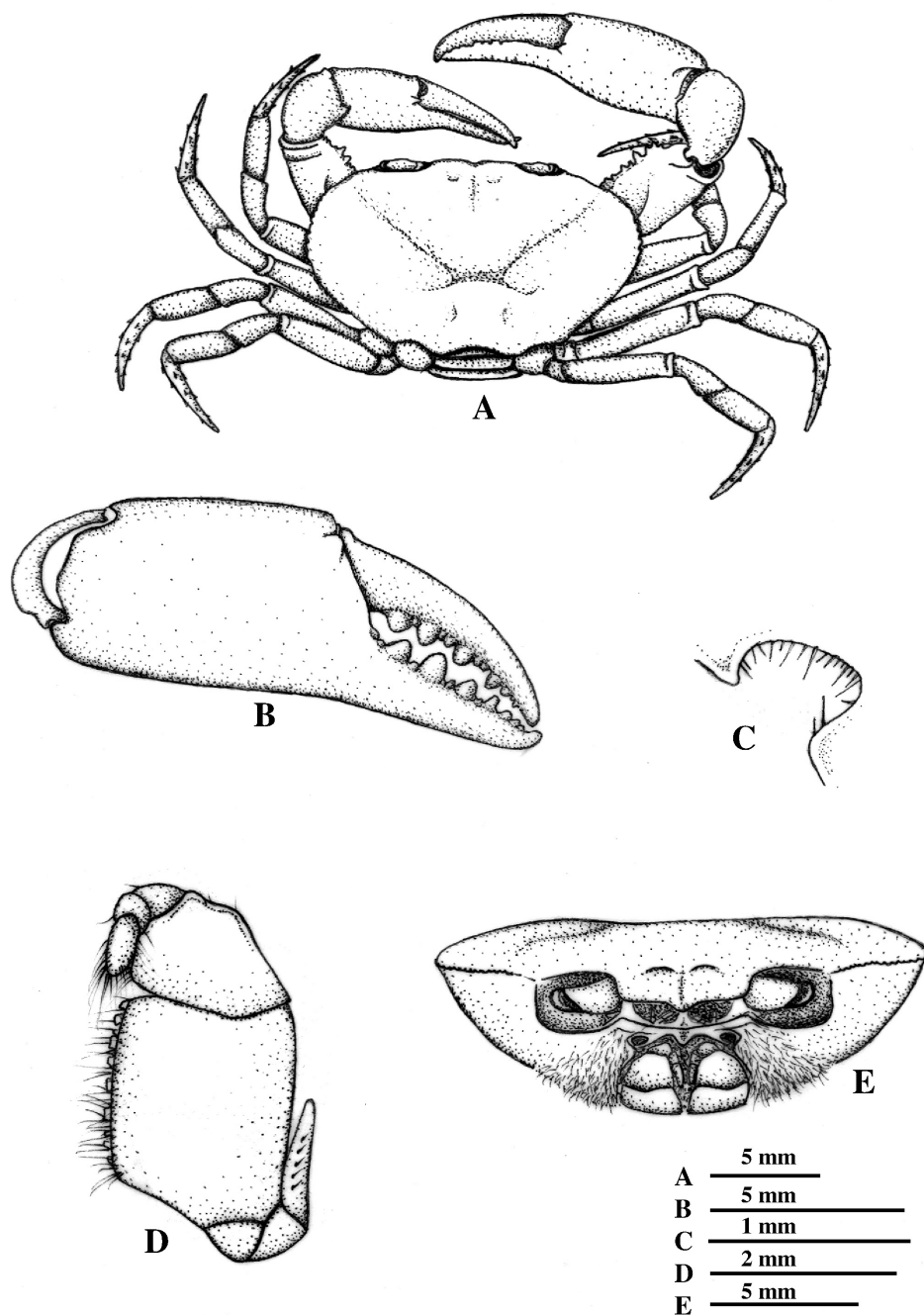


Fig. 1. *Neostrengeria natashae*, new species, male holotype, 1 male, cl 12.0 mm, cb 21.0 mm, ICN-MHN-CR 2616. **A**, dorsal view of carapace and pereopods; **B**, large cheliped, external view; **C**, opening of efferent branchial channel, external view; **D**, left third maxilliped, external view; **E**, frontal view of carapace.

First male gonopod strongly bent caudo-cephalic, with mesial side nearly straight and subdistal shallow depression, external border with row of setae; margin nearly sinuous, fringed with minute, acute spinules on distal portion (Fig. 2A); lateral lobe semicircular with distal portion semi-acute, directed distally, caudal surface excavated, external border with row of minute setae; accessory lobe spatulate with distal portion regularly rounded, caudal surface covered by rough papillae (Fig. 2A), subequal in length to lateral lobe, almost continuous with lateral lobe, except by V-shaped recess between accessory and lateral lobes distally, on lateral view (Fig. 2C); apex outline nearly oblong in distal view, latero-cephalic expanded into triangular projection, forming a cephalo-mesial angle of 90° with prominent acute spine, directed mesially (Fig. 2E); mesial lobe subtriangular, directed cephalically, ending in acute spine (Fig. 2D, E); meso-caudal projection of spermathecal channel terminating bifidly: internal and external papillae of equal size (Fig. 2D, E).

Color. The alcohol preserved holotype is brown (near Olive Brown, 28) with pale brown (near Cinnamon, 39) specks on the dorsal side of the carapace. The walking legs are brown (Antique Brown, 37) dorsally and light brown (Clay Color, 26) ventrally. The chelae are brown (near Cinnamon, 33) dorsally and light brown (Clay Color, 26) ventrally. The ventral surface of the carapace is brown (near Olive Brown, 28) with yellow specks (near Tawny Olive, 223D) on the sternum and abdominal segments.

Habitat. The specimens were collected in shaded, moist banks of small stream. They were found in soft sand, under rocks.

Etymology. The species is dedicated to the young Colombian-American naturalist Natasha Campos.

Remarks. This present new species closely resembles *Neostrengeria lindigiana* (Rathbun, 1897). The main distinguishing feature between the species is in the first male gonopod. In *N. natashae*, the mesial side is nearly straight with a subdistal shallow depression (nearly convex and sinuous subdistally in *N. lindigiana*); the lateral lobe is relatively narrower; the distal portion of the lateral lobe is semi-acute and directed distally (it is rounded and curved to the axis of gonopod in *N. lindigiana*); the accessory lobe is spatulated with the distal portion regularly rounded and subequal in length to lateral lobe (it is elongated and distinctly shorter than lateral lobe in *N. lindigiana*); and the apex outline is nearly oblong in distal view, with the latero-cephalic expanded into triangular projection and forming a cephalo-mesial angle of 90° with prominent acute spine, directed mesially (it is semicircular, forming caudo-cephalic rounded expansion with acute cephalic spine in *N. lindigiana*) (see Fig. 2; Campos, 2005: Fig. 54A-I).

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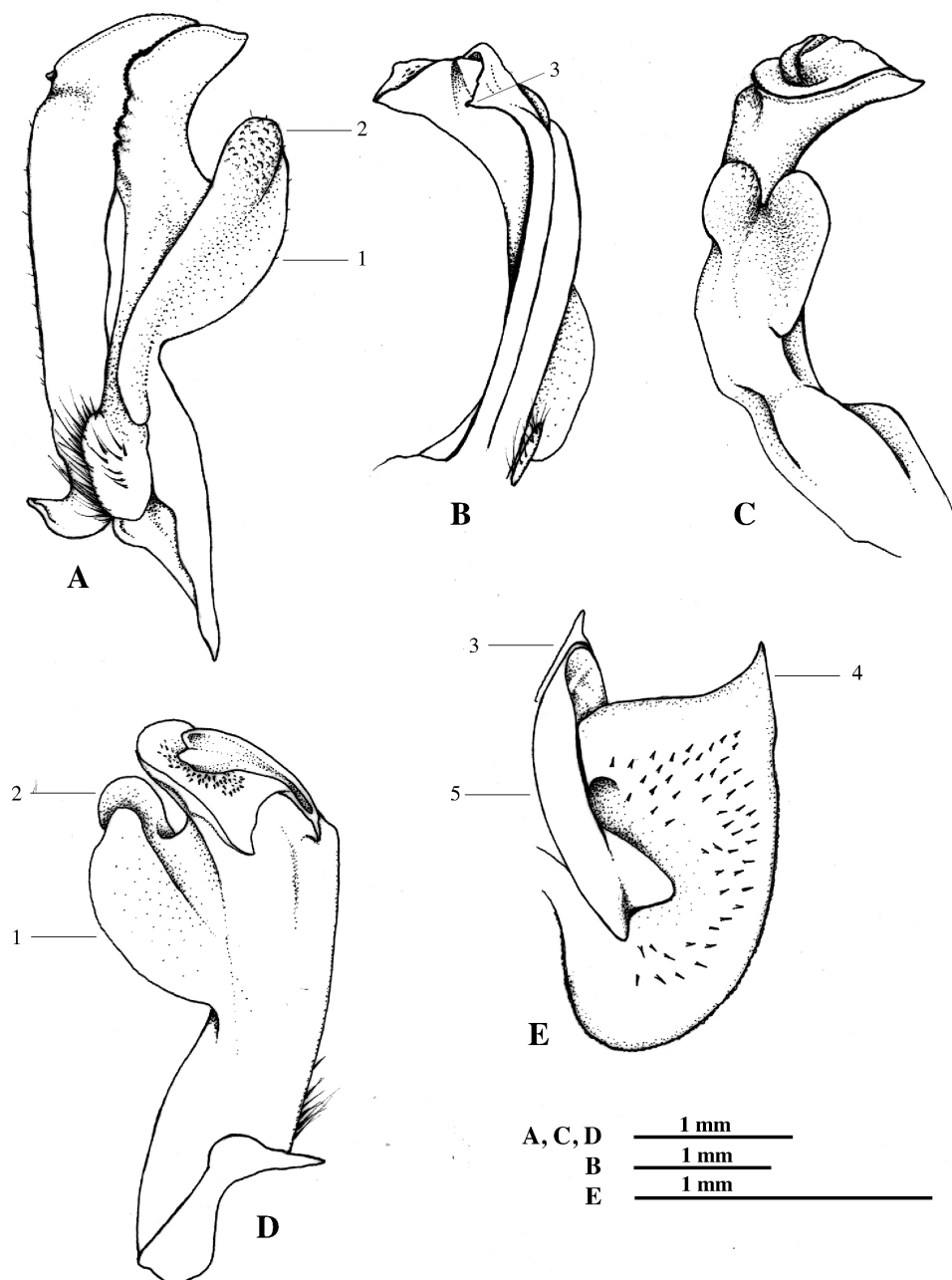


Fig. 2. *Neostrengeria natashae*, new species, male holotype, ICN-MHN-CR 2616. **A**, left first gonopod, caudal view; **B**, same, mesial view; **C**, same, lateral view; **D**, same, cephalic view; **E**, same, apex distal view. 1, lateral lobe; 2, accessory lobe; 3, mesial lobe; 4, cephalic spine; 5, meso-caudal projection of spermatic channel.

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